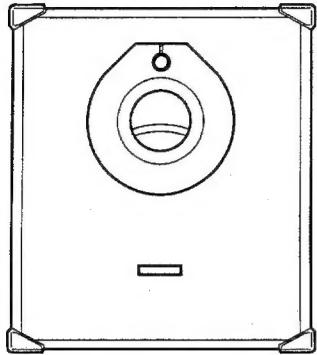


# aiwa



## TS-W45



ACTIVE SPEAKER SYSTEM

• TYPE : U, EZ, HR

S E R V I C E  
M A N U A L

# SPECIFICATIONS

<b>Input terminals</b>	INPUT 1 jack INPUT 2 terminals	<b>Speaker unit</b>	20 cm (Magnetically shielded type)
<b>Input sensitivity/Impedance</b>	INPUT 1: 0.3 V / 50 kilo ohms (at 60 Hz) INPUT 2: 3 V / 4.4 kilo ohms (L and R) (at 60 Hz)	<b>Power requirement</b>	U: AC 120 V, 60 Hz EZ: AC 230 V, 50 Hz HR: AC 120 V / 220 V - 240 V switchable, 50 / 60 Hz
<b>Output terminals</b>	SPEAKERS OUT terminals	<b>Power consumption</b>	U: 40 W EZ, HR: 60 W
<b>Power output</b>	FTC RULE 50 watts, Min. RMS at 8 ohms, from 45 Hz to 150 Hz, with no more than 1 % Total Harmonic Distortion 50 W (8 ohms, T.H.D. 1 % at 60 Hz) 60 W (8 ohms, T.H.D. 10 % at 60 Hz) 35 Hz - 200 Hz	<b>Dimensions</b>	385 x 325 x 345 mm (W/H/D)
<b>Frequency response</b>	Bass reflex type	<b>Weight</b>	7.5 kg

• Design and specifications are subject to change without notice.

## ACCESSORIES / PACKAGE LIST

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

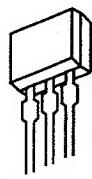
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-YP2-901-010	IB, H(ECA)D<HR>	
1	8Z-YP2-906-010	IB, EZ(9L)D<EZ>	
1	8Z-YP2-903-010	IB, U(ESF)DHM<U>	
2	87-YP3-632-010	186-C13000, CORD ASSY	
⚠ 3	87-099-789-010	PLUG, CONVERSION IR-44<HR>	

# ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
<b>TRANSISTOR</b>							
87-026-609-080	TR, KTA1266GR	C406	87-010-385-080	CAP, ELECT 220-25V			
87-026-610-080	TR, KTC3198GR	C407	87-010-405-080	CAP, ELECT 10-50V			
87-A30-215-010	TR, 2SD2025	C408	87-010-405-080	CAP, ELECT 10-50V			
87-A30-214-010	TR, 2SB1344	C409	87-010-405-080	CAP, ELECT 10-50V			
87-A30-087-080	C-FET, 2SK2158	C410	87-010-404-080	CAP, ELECT 4.7-50V			
87-A30-091-080	FET, 2SJ460	C411	87-010-405-080	CAP, ELECT 10-50V			
87-026-269-080	TR, DTA114ES	C412	87-010-405-080	CAP, ELECT 10-50V			
		CN202	87-049-919-010	CONN, 3P EH V WHT			
		CN301	87-099-043-010	CONN 2P EH			
		J401	87-099-801-010	JACK, PIN 1P BLK			
<b>DIODE</b>							
86-SP2-646-010	151-540235, DIODE IN5402LT	J402	86-SP2-641-110	TERMINAL, SPKR 4P DH			
87-020-465-080	DIODE, ISS133 (110MA)	J403	86-SP2-641-110	TERMINAL, SPKR 4P DH			
		R223	87-A00-258-080	RES, M/F 0.22-1W J			
		R224	87-A00-258-080	RES, M/F 0.22-1W J			
		S301	86-SP2-633-010	SW, SL 1-1-2			
<b>MAIN C.B</b>							
C104	87-016-539-090	CAP, E 3300-35 SMG	S401	86-SP2-633-010	SW, SL 1-1-2		
C105	87-016-539-090	CAP, E 3300-35 SMG	VR401	87-A91-147-010	VR, RTRY 50KX1 H XVO121PHJN20FS		
C108	87-018-209-010	CAP, TC-U 0.1-50<EZ>	<b>TRANS C.B</b>				
C109	87-018-209-010	CAP, TC-U 0.1-50<EZ>	C101	87-019-112-010	CAP, 0.01 SPARK-KILLER		
C110	87-018-209-010	CAP, TC-U 0.1-50<EZ>	C102	87-018-209-080	CAP, CER 0.1-50V		
C111	87-010-197-080	CAP, CHIP 0.01 DM<EZ>	C103	87-018-209-080	CAP, CER 0.1-50V		
C201	87-010-246-080	CAP, ELECT 47-35V	CN101	87-049-469-010	CONN, 4P V WHT EH		
C202	87-010-246-080	CAP, ELECT 47-35V	CN102	87-099-674-010	CONN, 2P VA V		
C203	87-010-384-080	CAP, ELECT 100-25V	▲ F101	87-035-485-010	FUSE, 2A 125V D UL<U>		
C204	87-010-384-080	CAP, ELECT 100-25V	▲ FC101	87-033-213-080	CLAMP, FUSE<U>		
C205	87-010-384-080	CAP, ELECT 100-25V	▲ FC102	87-033-213-080	CLAMP, FUSE<U>		
C206	87-010-384-080	CAP, ELECT 100-25V	▲ PR101	87-026-681-080	PROTECTOR 5A 60V 491<EZ, HR>		
C207	87-012-156-080	C-CAP, S 220P-50 CH	▲ PR102	87-026-681-080	PROTECTOR 5A 60V 491<EZ, HR>		
C208	87-012-156-080	C-CAP, S 220P-50 CH	▲ PT101	87-YP4-613-010	200-TSW35EU, PT E<EZ>		
C209	87-010-196-080	CHIP CAPACITOR, 0.1-25	▲ PT101	87-YP4-605-010	200-TSW35UL, PT<U>		
C210	87-010-196-080	CHIP CAPACITOR, 0.1-25	▲ PT101	87-YP4-612-010	PT, LH<HR>		
C211	87-010-196-080	CHIP CAPACITOR, 0.1-25	▲ S102	87-A90-234-010	SW, SL 1-2-2 SW2201<HR>		
C212	87-010-196-080	CHIP CAPACITOR, 0.1-25	▲ T101	82-304-743-010	TERMINAL, 1P		
C213	87-010-197-080	CAP, CHIP 0.01 DM	▲ T102	82-304-743-010	TERMINAL, 1P		
C214	87-010-406-080	CAP, ELECT 22-50	<b>FRONT C.B</b>				
C215	87-010-406-080	CAP, ELECT 22-50	D301	82-YP2-617-010	LED, 3 GRN STRAIGHT		
C301	87-010-401-080	CAP, ELECT 1-50V	S101	87-YP5-626-010	SW, PUSH 1-1-1 SY16-52-3		
C304	87-010-544-080	CAP, ELECT 0.1-50V	<b>PHASE SW C.B</b>				
C305	87-010-383-080	CAP, ELECT 33-25V	CN201	87-A60-848-010	CONN, 4P H BLK TB		
C306	87-010-405-080	CAP, ELECT 10-50V	FC201	82-YP2-615-010	F-CABLE, 4P 2.5		
C307	87-010-544-080	CAP, ELECT 0.1-50V	S201	87-A91-148-010	SW, SL 2-2-2 SS22J02G12A		
C308	87-010-404-080	CAP, ELECT 4.7-50V					
C401	87-010-401-080	CAP, ELECT 1-50V					
C402	87-010-385-080	CAP, ELECT 220-25V					
C405	87-010-401-080	CAP, ELECT 1-50V					

# TRANSISTOR ILLUSTRATION



S D G



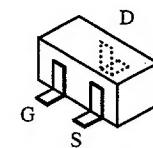
E C B



E C B



B C E



2SK2158

2SJ460

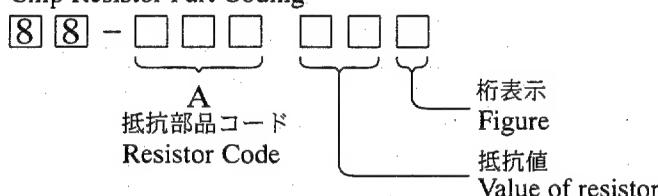
KTA1266GR  
KTC3198GR

DTA114ES

2SD2025  
2SB1344

## ○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち  
Chip Resistor Part Coding



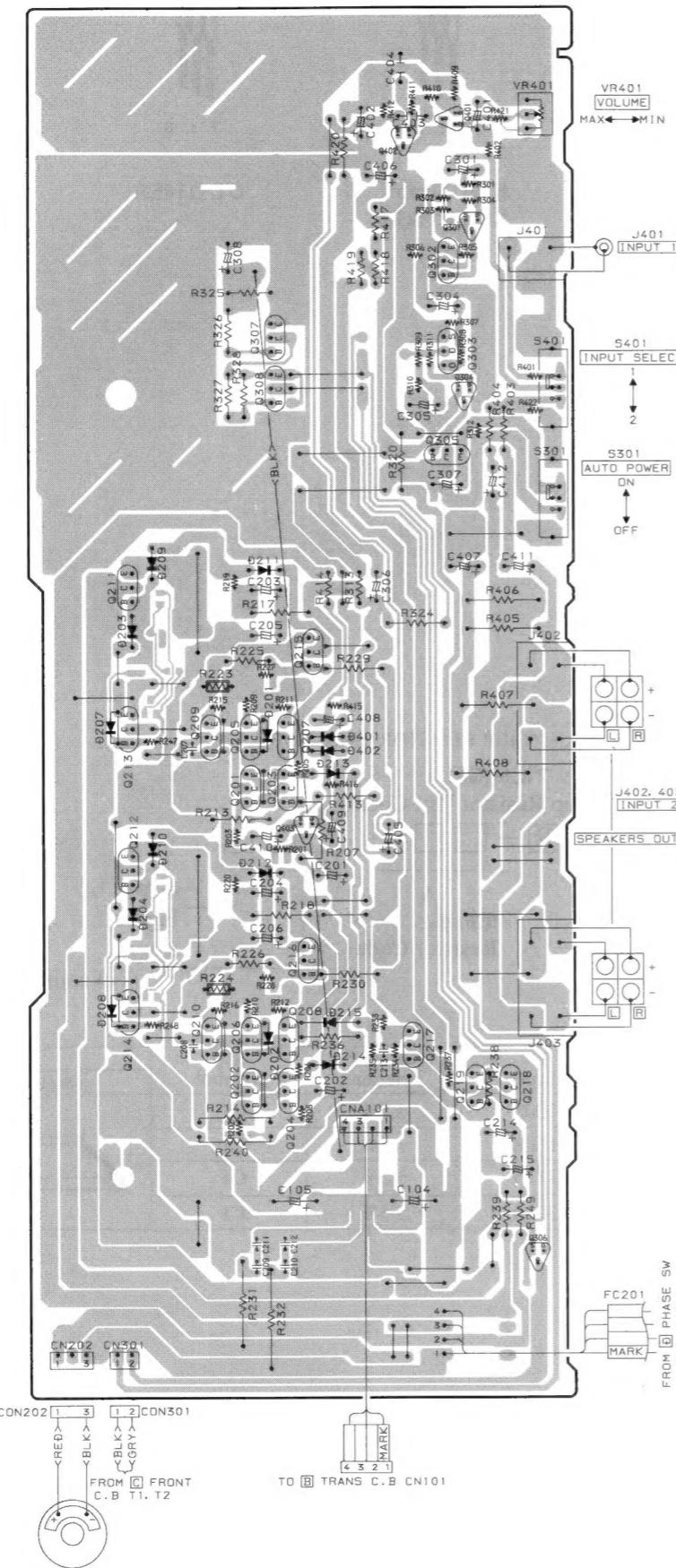
## チップ抵抗 Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm)			抵抗コード Resistor Code : A
				外形／Form	L	W	
1/16W	1005	± 5%	CJ		1.0	0.5	0.35
1/16W	1608	± 5%	CJ		1.6	0.8	0.45
1/10W	2125	± 5%	CJ		2	1.25	0.45
1/8W	3216	± 5%	CJ		3.2	1.6	0.55

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14

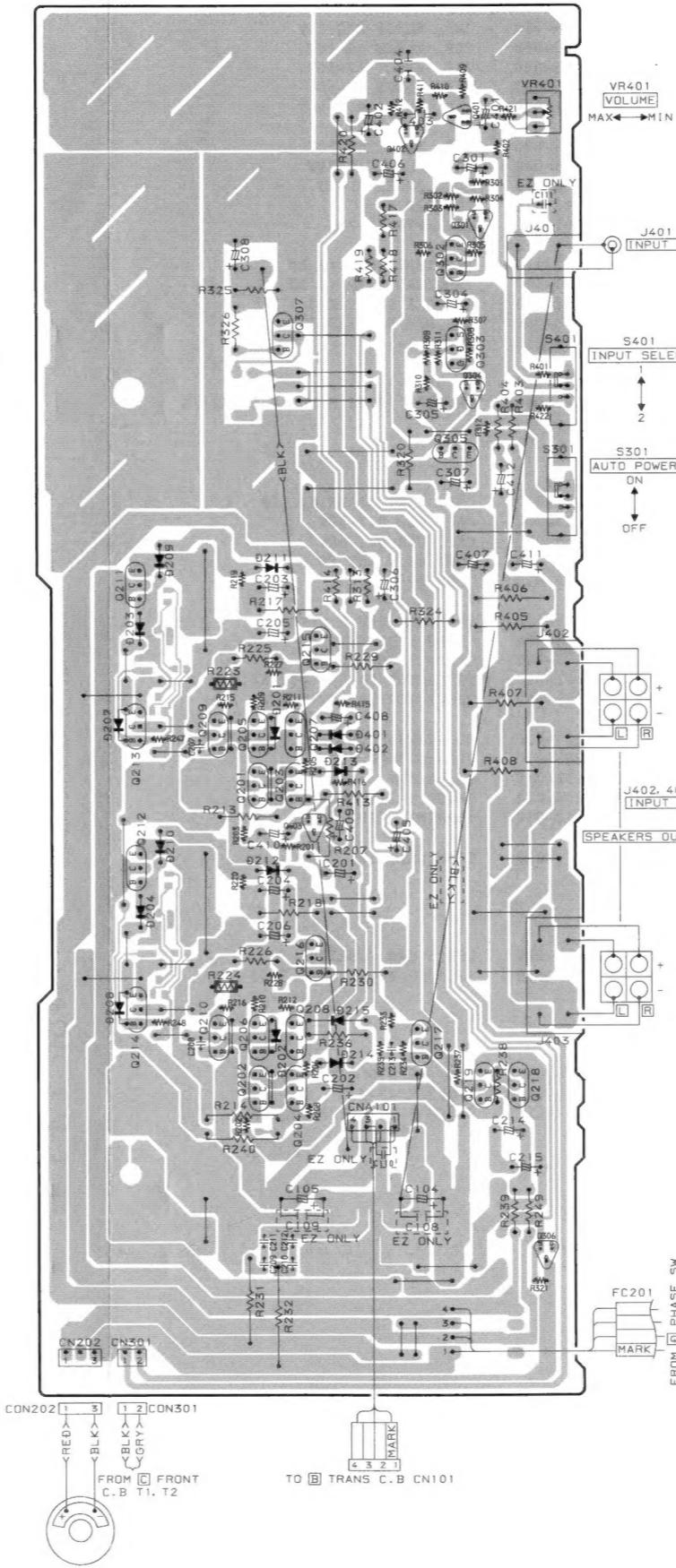
A MAIN C.

<U MODEL ONLY>

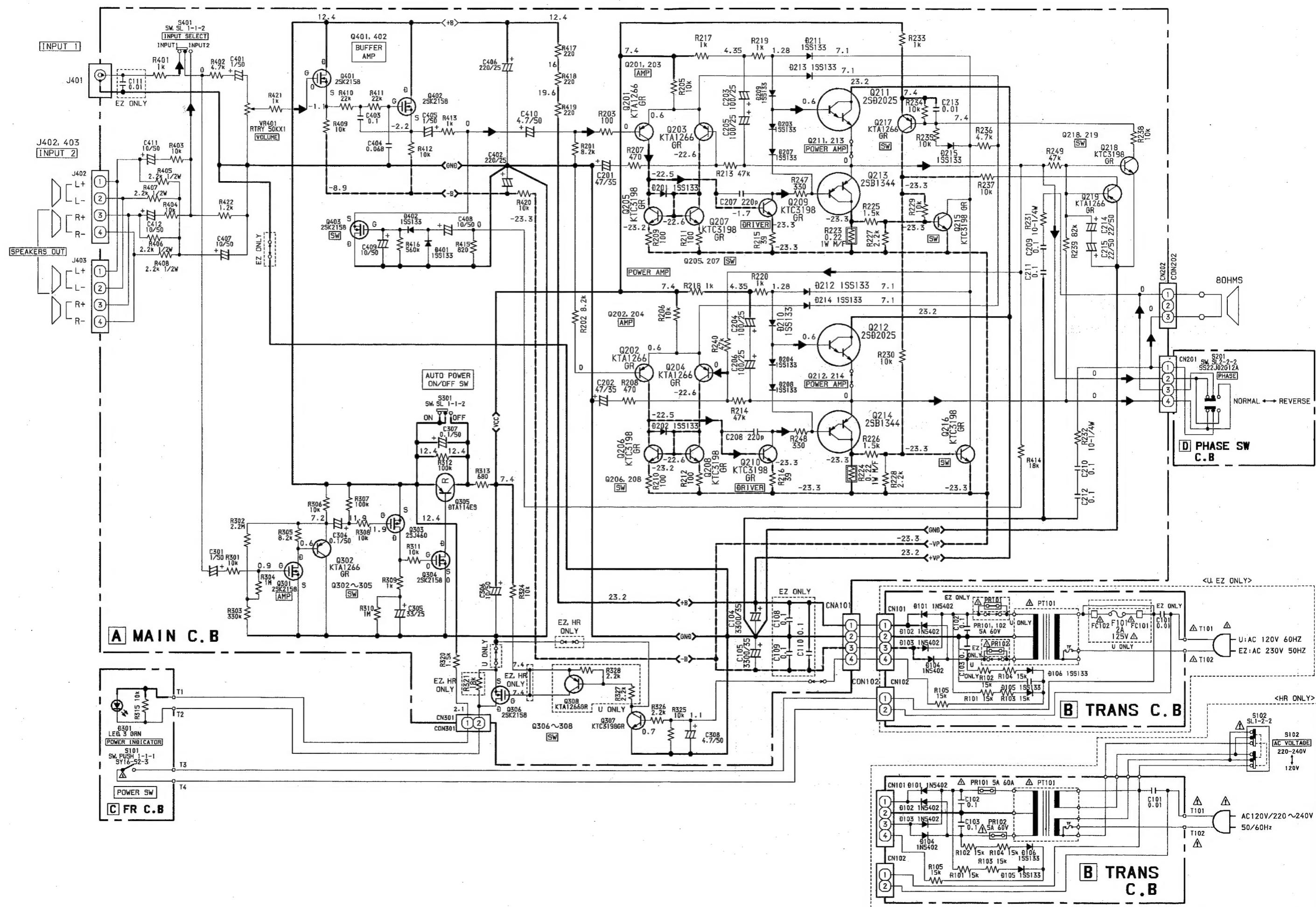


A MAIN C.I.

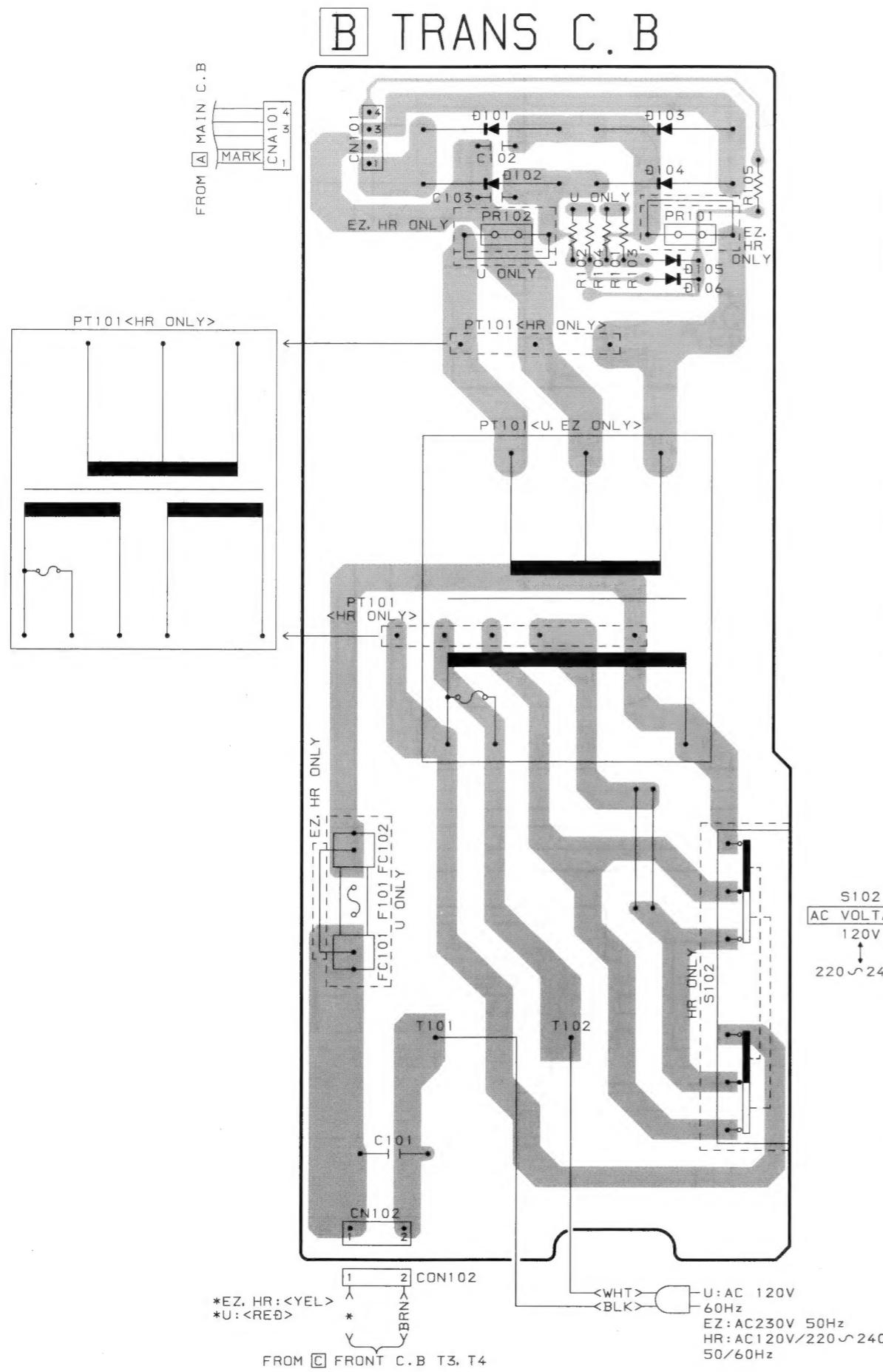
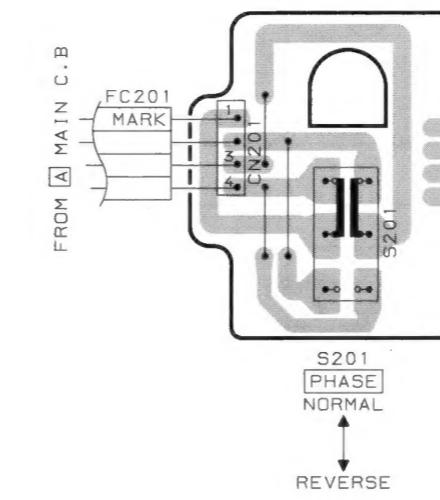
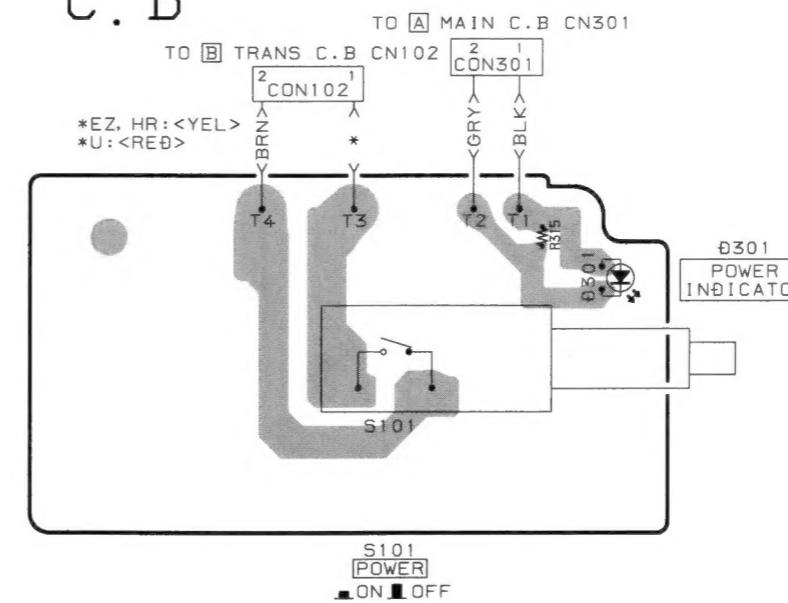
<EZ. HR MODEL ON



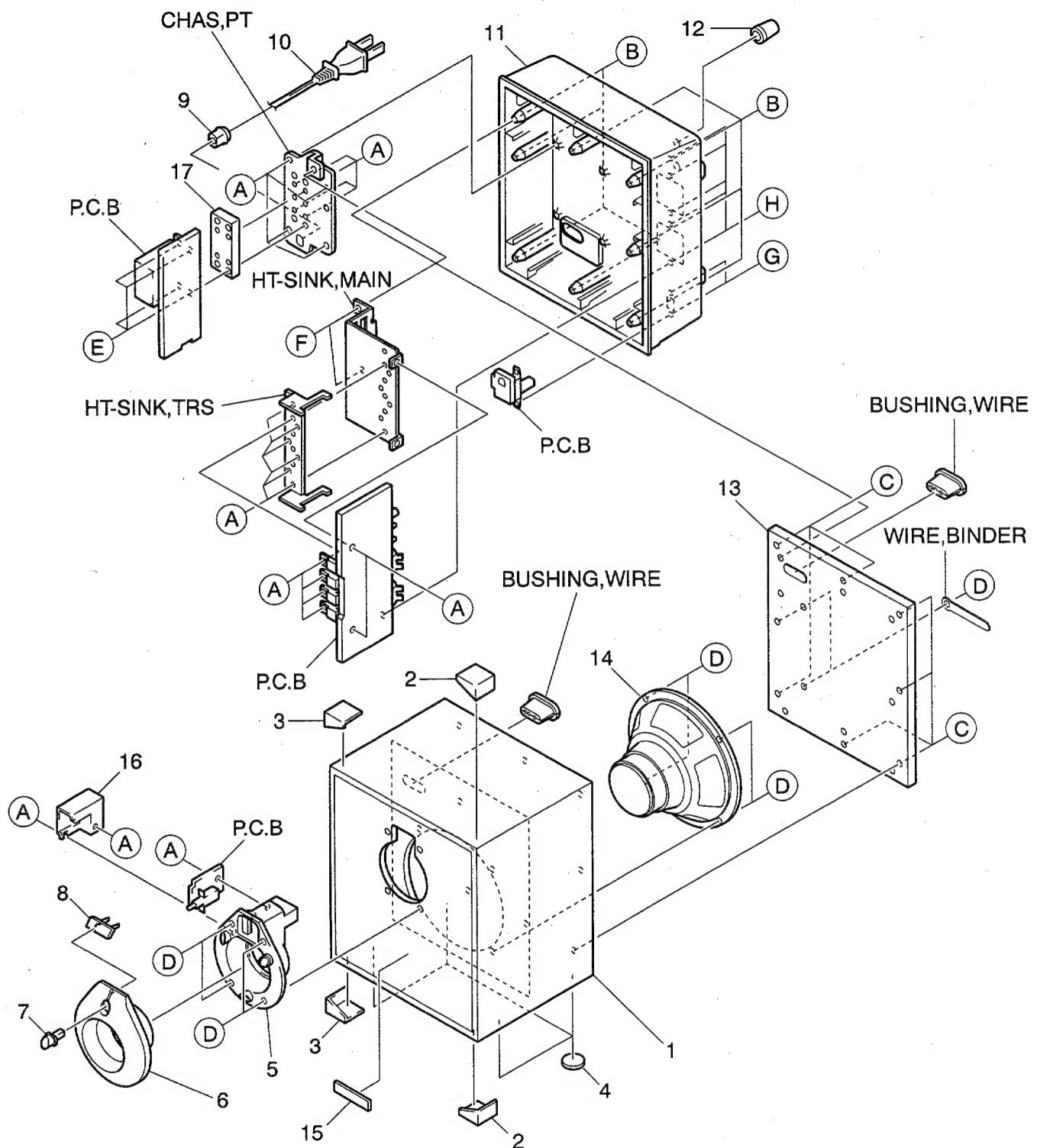
## SCHEMATIC DIAGRAM



1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14

**D PHASE SW C. B****C FRONT C. B**

MECHANICAL EXPLODED VIEW 1 / 1



# MECHANICAL PARTS LIST 1 / 1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-YP2-007-010		CABI, WOOD BOX<U, HR>	14	8Z-YP2-610-010		SPKR, 200 8OHM
1	8Z-YP2-014-010		CABI, WOOD BOX E1 GRAY<EZ>	15	87-054-087-010		BADGE, AIWA 40
2	87-YP4-012-010		COVER, R	16	8Z-YP2-217-010		COVER, SW UL<U>
3	87-YP4-011-010		COVER, L	16	8Z-YP2-214-010		COVER, SW<EZ, HR>
4	8Z-YP2-205-010		FOOT, BOX	17	87-YP5-225-010		HLDR, TRANS<HR>
5	8Z-YP2-201-010		CASE, SW<EZ, HR>	A	87-067-703-010		TAPPING SCREW, BVT2+3-10
5	8Z-YP2-213-010		CASE, SW UL<U>	B	8Z-YP2-211-010		SW+3.5-18
6	8Z-YP2-002-010		PANEL, DUCT<EZ, HR>	C	87-YP4-211-010		SW+3.5-22
6	8Z-YP2-015-010		PANEL, DUCT UL<U>	D	87-YP4-217-010		BVT1+3.5-12
7	8Z-YP2-004-010		BTN, POWER	E	87-067-566-010		TAPPING SCREW, VFTT+3-6<U>
8	8Z-YP2-005-010		WINDOW, LED	E	87-761-096-410		VFT2+3-10 GLD<EZ, HR>
9	86-SP2-637-010		BUSHING, AC U	F	87-067-689-010		TAPPING SCREW, BVTT+3-8
△ 10	87-YP4-620-010		AC CORD ASSY, U SPT-2W<U>	G	87-741-074-410		UT2+2.6-8
△ 10	86-SP2-634-010		AC CORD, E<EZ, HR>	H	87-755-096-010		VT2+3-10
11	8Z-YP2-006-010		CABI, REAR<EZ>				
11	8Z-YP2-001-010		CABI, REAR HR<HR>				
11	8Z-YP2-009-010		CABI, REAR UL<U>				
12	8Z-YP2-003-010		KNOB, RTRY VOL				
13	8Z-YP2-207-010		PANEL, WOOD<U, HR>				
13	8Z-YP2-212-010		PANEL, WOOD E1<EZ>				

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Sliver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange		

## REFERENCE NAME LIST

ELECTRICAL SECTION		MECHANICAL SECTION	
DESCRIPTION	REFERENCE NAME	DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS	ADHESIVE	SHEET ADHESIVE
C-	CHIP	AZ	AZIMUTH
C-CAP	CAP, CHIP	BAR-ANT	BAR-ANTENNA
C-CAP TN	CAP, CHIP TANTALUM	BAT	BATTERY
C-COIL	COIL, CHIP	BATT	BATTERY
C-DI	DIODE, CHIP	BRG	BEARING
C-DIODE	DIODE, CHIP	BTN	BUTTON
C-FET	FET, CHIP	CAB	CABINET
C-FOTR	FILTER, CHIP	CASS	CASSETTE
C-JACK	JACK, CHIP	CHAS	CHASSIS
C-LED	LED, CHIP	CLR	COLLAR
C-RES	RES, CHIP	CONT	CONTROL
C-SFR	SFR, CHIP	CRSR	CURSOR
C-SLIDE SW	SLIDE SWITCH, CHIP	CU	CUSHION
C-SW	SWITCH, CHIP	CUSH	CUSHION
C-TR	TRANSISTOR, CHIP	DIR	DIRECTION
C-VR	VOLUME, CHIP	DUBB	DUBBING
C-ZENER	ZENER, CHIP	FL	FRONT LOADING
CAP, CER	CAP, CERA-SOL	FLY-WHL	FLYWHEEL
CAP, E	CAP, ELECT	FR	FRONT
CAP, M/F	CAP, FILM	FUN	FUNCTION
CAP, TC	CAP, CERA-SOL	G-CU	G-CUSHION
CAP, TC-U	CAP, CERA-SOL SS	HDL	HANDOL
CAP, TN	CAP, TANTALUM	HIMERON	CLOTH
CERA FIL	FILTER, CERAMIC	HINGE, BAT	HINGE, BATTERY
CF	FILTER, CERAMIC	HLDR	HOLDER
DL	DELAY LINE	HT-SINK	HEAT SINK
E/CAP	CAP, ELECT	IB	INSTRUCTION BOOKLET
FILT	FILTER	IDLE	IDLER
FLTR	FILTER	IND, L-R	INDICATOR, L-R
FUSE RES	RES, FUSE	KEY, CONT	KEY, CONTROL
MOT	MOTOR	KEY, PRGM	KEY, PROGRAM
P-DIODE	PHOTO DIODE	KNOB, SL	KNOB, SLIDE
P-SNSR	PHOTO SENSER	LBL	LABEL
P-TR	PHOTO TRANSISTOR	LID, BATT	LID, BATTERY
POLY VARI	VARIABLE CAPACITOR	LID, CASS	LID, CASSETTE
PPCAP	CAP, PP	LVR	LEVER
PT	POWER TRANSFORMER	P-SP	P-SPRING
PTR, RES	PTR, MEFL	PANEL, CONT	PANEL, CONTROL
RC	REMOTE CONTROLLER	PANEL, FR	PANEL, FRONT
RES NF	RES, NON-FLAMMABLE	PRGM	PROGRAM
RESO	RESONATOR	PULLY, LOAD MO	PULLY, LOAD MOTOR
SHLD	SHIELD	RBN	RIBBON
SOL	SOLENOID	S-	SPECIAL
SPKR	SPEAKER	SEG	SEGMENT
SW, LVR	SWITCH, LEVER	SH	SHEET
SW, RTRY	SWITCH, ROTARY	SHLD-SH	SHIELD-SHEET
SW, SL	SWITCH, SLIDE	SL	SLIDE
TC CAP	CAP, CERA-SOL	SP	SPRING
THMS	THERMISTOR	SP-SCREW	SPECIAL-SCREW
TR	TRANSISTOR	SPACER, BAT	SPACER, BATTERY
TRIMER	CAP, TRIMMER	SPR	SPRING
TUN-CAP	VARIABLE CAPACITOR	SPR-P	P-SPRING
VIB, CER	RESONATOR, CERAMIC	SPR-PC-PUSH	P-SPRING, C-PUSH
VIB, XTAL	RESONATOR, CRYSTAL	T-SP	T-SPRING
VR	VOLUME	TERM	TERMINAL
ZENER	DIODE, ZENER	TRIG	TRIGGER
		TUN	TUNING
		VOL	VOLUME
		W	WASHER
		WHL	WHEEL
		WORM-WHL	WORM-WHEEL

サービス技術ニュース	
番号	連絡内容
G- -	
G- -	
G- -	

**アイワ株式会社  
AIWA CO.,LTD.**

〒110-8710 東京都台東区池之端1-2-11 ☎03 (3827) 3111 (代表)

Printed in Singapore

9420208, 931261

Tokyo Japan